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FEDERAL TRADE COMMISSION

**UNITED STATES DISTRICT COURT  
FOR THE NORTHERN DISTRICT OF CALIFORNIA  
San Francisco Division**

FEDERAL TRADE COMMISSION,  
  
Plaintiff,

v.

LUMOS LABS, INC., a corporation  
d/b/a LUMOSITY  
and  
KUNAL SARKAR, and  
MICHAEL SCANLON,  
Individually and as officers of LUMOS  
LABS, INC.,

Defendants.

Case No. \_\_\_\_\_

**COMPLAINT FOR PERMANENT  
INJUNCTION AND OTHER  
EQUITABLE RELIEF**

Plaintiff, the Federal Trade Commission (“Commission” or “FTC”), for its Complaint  
alleges:

**COMPLAINT**



1 appropriate in each case, including rescission or reformation of contracts, restitution, the refund  
2 of monies paid, and the disgorgement of ill-gotten monies. 15 U.S.C. § 53(b).

3  
4 **DEFENDANTS**

5 6. Defendant Lumos Labs, Inc. (“Lumos Labs”) is a Delaware corporation with its  
6 principal place of business at 140 New Montgomery Street, San Francisco, California. Lumos  
7 Labs transacts or has transacted business in this district and throughout the United States. At all  
8 times material to this Complaint, acting alone or in concert with others, Lumos Labs has  
9 advertised, marketed, distributed, or sold the Lumosity Program to consumers throughout the  
10 United States.

11  
12 7. Defendant Kunal Sarkar is the co-founder and Chief Executive Officer of Lumos  
13 Labs. Sarkar is a member of the company’s Board of Directors and a shareholder. Sarkar  
14 resides in this district and, in connection with the matters alleged herein, transacts or has  
15 transacted business in this district and throughout the United States.

16  
17  
18 8. At all times material to this Complaint, acting alone or in concert with others,  
19 Sarkar has formulated, directed, controlled, had the authority to control, or participated in the  
20 acts and practices set forth in this Complaint. Among other things, he actively participated in  
21 creating the overall marketing strategy for the Lumosity Program and developed specific plans to  
22 market the Lumosity Program through television, radio, email, social media, Google AdWords,  
23 and testimonials. Sarkar also oversaw the day-to-day marketing operations of Lumos Labs,  
24 including aspects of marketing spend, media buying, and product messaging. Sarkar regularly  
25  
26  
27  
28

1 consulted with members of Lumos Labs' marketing and science teams to evaluate advertising  
2 claims about the Lumosity Program's benefits, including claims that form the basis of this  
3 Complaint.  
4

5  
6 9. Defendant Michael Scanlon is the co-founder of Lumos Labs, and until August  
7 2013, served as its Chief Scientific Officer. Scanlon is a member of the company's Board of  
8 Directors and a shareholder. Scanlon resides in this district and, in connection with the matters  
9 alleged herein, transacts or has transacted business in this district and throughout the United  
10 States.  
11  
12

13 10. At all times material to this Complaint, acting alone or in concert with others,  
14 Scanlon has formulated, directed, controlled, had the authority to control, or participated in the  
15 acts and practices set forth in this Complaint. As Lumos Labs' co-founder, Scanlon oversaw  
16 activities related to public relations, research and development, and business strategy. He led  
17 Lumos Labs' research and development team until 2009. Since at least 2009, Scanlon has  
18 controlled a variety of the company's operations, including public relations and business  
19 development. Among other things, he has actively participated in promoting the Lumosity  
20 Program's benefits to the public, including through blog posts and other marketing. Scanlon's  
21 duties have included reviewing and approving marketing and promotional materials for the  
22  
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1 Lumosity Program, including materials with claims about the Program's benefits that form the  
2 basis of this Complaint.  
3

4 **COMMERCE**

5  
6 11. At all times material to this Complaint, Defendants have maintained a substantial  
7 course of trade in or affecting commerce, as "commerce" is defined in Section 4 of the FTC Act,  
8 15 U.S.C. § 44.

9 **DEFENDANTS' BUSINESS ACTIVITIES**

10  
11 12. Since 2007, Defendants have labeled, advertised, marketed, distributed, and sold  
12 the Lumosity Program directly to consumers via the Lumosity.com website, and as mobile apps  
13 through app stores. Subscription options vary, including monthly (\$14.95), yearly (\$79.95), two-  
14 year (\$129.95), and lifetime (\$299.95) subscriptions.

15  
16 13. The Lumosity Program is intended for users of all ages and purportedly provides  
17 "brain training" through video games. Defendants have represented that brain training with the  
18 Lumosity Program will improve performance on everyday tasks; will improve school, work, and  
19 athletic performance; will delay age-related decline in memory and protect against other age-  
20 related conditions such as mild cognitive impairment, dementia, and Alzheimer's disease; and  
21 will reduce cognitive impairment associated with the side effects of chemotherapy, post-  
22 traumatic stress disorder, traumatic brain injury, attention deficit hyperactivity disorder, Turner  
23 syndrome, stroke, and other health conditions.  
24

25  
26 14. Each of the Lumosity Program's more than 40 games purports to target a specific  
27 brain area. Defendants recommend that users train with the Lumosity Program for  
28 approximately 10 to 15 minutes, several days per week.

1           15.     After signing up for the Lumosity Program, users personalize their brain training  
2 by selecting the specific aspects of each brain area that they seek to improve and the real-world  
3 skills they hope to sharpen. For example, for memory, users can select to improve their ability to  
4 learn new subjects quickly and accurately, remember names after the first introduction, and  
5 recall the location of objects. For attention, they can choose to improve productivity and  
6 precision at work or home and to maintain focus on important tasks all day. For flexibility, they  
7 can select to communicate clearly, and for problem solving, they can indicate that they want to  
8 be able to dissect complex arguments and calculate figures in their head.  
9  
10

11           16.     Each training session typically involves playing five games that are either selected  
12 by the user or generated by an algorithm based on the user's training preferences and past  
13 performance. Most of the Lumosity Program's games are adaptive, growing increasingly  
14 difficult as a user's game performance improves. Users are able to track their performance on  
15 the games and compare their scores against other Lumosity Program users using the Lumosity  
16 Performance Index ("LPI"), formerly referred to as the Brain Performance Index ("BPI").  
17

18           17.     Defendants have widely advertised the Lumosity Program through the  
19 Lumosity.com website, mobile applications, short form television commercials, radio  
20 advertisements, and magazines. Television advertisements have aired nationally on 44 broadcast  
21 and cable networks, including CNN, Fox News, HGTV, and the History Channel. Defendants'  
22 radio campaign includes sponsorship advertisements on NPR, spots on internet and satellite radio  
23 services such as Pandora, Sirius XM, and Spotify, and endorsements on national radio shows and  
24 in podcasts by celebrity hosts, including Colin Cowherd, Adam Carolla, and Dr. Drew.  
25 Defendants have employed an extensive search engine campaign, including through Google  
26 AdWords, and have purchased hundreds of keywords, including many variations of words  
27  
28

related to memory, attention, intelligence, brain, cognition, dementia, and Alzheimer's disease.

Defendants have also engaged in an extensive email marketing campaign to subscribers and free-trial users.

### Advertising Claims

18. To induce consumers to purchase the Lumosity Program, Defendants have disseminated, or caused to be disseminated, advertisements, including, but not limited to, the attached Exhibits A through N. These advertisements contain the following statements and depictions, among others:

A. Rowan TV ad (Exhibit A)

MALE SPEAKER: I can tell a big difference, decisions come quicker, I'm more productive. It's serious brain training, it just feels like games. Well, Lumosity.com is based on neuroscience, so I figured if I want to get smart, I have to start smart, you know.

VOICEOVER: No matter why you want a better brain, Lumosity.com can help. It's like a personal trainer for your brain, improving your performance with the science of neuroplasticity, but in a way that just feels like games. Start training with Lumosity.com right now and discover what your brain can do.

B. Website capture, June 14, 2013 (Exhibit B)

### **Harness your brain's neuroplasticity and train your way to a brighter life**

Lumosity turns neuroscience breakthroughs into fun, effective games. Stimulate your brain today.

\* \* \*

### **Scientifically designed games**

Research shows that your brain creates new neural circuitry when challenged—our scientists have turned those challenges into cognitive games that improve core cognitive functions.

\* \* \*

## Built on proven neuroscience research

Lumosity is based on the science of **neuroplasticity**—your brain’s ability to strengthen and grow. Multiple research papers have been published on Lumosity’s effectiveness—and with its ongoing research collaborations, Lumosity continues to improve its ability to change your brain.

LEARN MORE ABOUT THE SCIENCE

## Trusted by over 35 million users

READ MORE STORIES

Playing Lumosity has improved my concentration and mental activity, helping me to be a better programmer.

**Jason P.**

Lumosity helps me to feel mentally agile. My mental math has gotten better and I’m more productive at work.

**Melissa W.**

Lumosity has made me aware of the areas I need to improve on. When I see progress, I feel energized and positive.

**Cory V.**

\* \* \*

## Build your Personalized Training Program

\* \* \*

### 1. Memory

Select all aspects of your memory that you want to train

[image of keys]

Recalling the locations of objects

[image of contact icon]

Remembering names after the first introduction

[image of books]

Learning new subjects quickly and accurately

[image of checklist]

Keeping track of several ideas at the same time

\* \* \*

### 2. Attention

Select all aspects of your attention that you want to train

[image of business chart]

Maintaining focus on important tasks all day



[image of cell phone] Improving productivity and precision at work or home  
[image of laptop] Concentrating while learning something new  
[image of target] Avoiding distractions

\* \* \*

### **Designed by neuroscientists**

Lumosity exercises are designed by neuroscientists and continually evaluated through independent research studies at institutions such as Harvard, Stanford, and UC Berkeley.

\* \* \*

### **Completed Research behind Lumosity**

\* \* \*

Lumosity can improve key skills that affect quality of life

\* \* \*

Lumosity game performance is linked to when users train

\* \* \*

Large-scale study on how students can benefit from Lumosity

1204 students from 40 different schools participated in a semester-long study of Lumosity in the classroom. Students who supplemented their regular curricula with Lumosity training improved more than a control group on a battery of cognitive assessments.

\* \* \*

Lumosity increases prefrontal cortex activity in cancer survivors

A published study by Dr. Shelli Kesler of Stanford University Medical School shows that Lumosity can improve cognition in childhood cancer survivors. 23 pediatric cancers survivors completed 40 sessions of Lumosity training to combat “chemofog”—and they significantly increased processing speed,

1 cognitive flexibility, and memory recall. In addition, brain imaging results  
2 showed increased activity in the prefrontal cortex, a part of the brain  
3 associated with the ability to plan, organize information, and focus attention.

**Read more**

4 \* \* \*

5 **Healthy adults can benefit from**  
6 **Lumosity training**

7 \* \* \*

8 **Lumosity gives students a boost in**  
9 **classrooms worldwide**

10 1,392 students from 43 different schools took part in an investigation of  
11 Lumosity's effect on academic performance as part of the Lumosity  
12 Education Access Program (LEAP). Students aged 6 to 18 took standardized  
13 assessments of cognitive performance before and after Lumosity training to  
14 measure baseline improvement. After several weeks, the trained group  
improved significantly over the education-as-usual control group on these  
standardized assessments. And the more training, the larger the  
improvements. **Read more**

15 \* \* \*

16 **Lumosity can enhance brain function**  
17 **and math skills in girls with Turner**  
18 **syndrome**

19 Training with Lumosity can enhance cognitive function and change the way  
20 the brain processes math, according to a study by Dr. Shelli Kesler. Kesler  
21 worked with 18 girls with Turner syndrome--a genetic disorder known to  
22 disrupt cognitive functioning and produce deficits in math ability. Participants  
23 used special math-focused Lumosity training over the course of 6 weeks and  
24 experienced clinically significant improvements in processing speed,  
cognitive flexibility, visual attention, and math skills on tests. fMRI brain scans  
revealed changes in brain activity in the frontal and parietal regions related to  
executive control and attention. **Read more**

25 \* \* \*

26 **Lumosity improves sustained attention**  
27 **in study of mild cognitive impairment**

28 Researchers at the University of New South Wales in Sydney, Australia  
published research showing that Lumosity training improved cognition in  
older adults with mild cognitive impairment (MCI)--a disease linked to

Alzheimer's. The study's 16 participants completed 30 sessions of Lumosity training over the course of 8-10 weeks and improved at a visual sustained attention test. Another group of participants served as controls and received regular treatment without cognitive training. **Read more**

\* \* \*

Lumosity improves math skills in teens

\* \* \*

Lumosity training transfers to multiple measures of cognitive performance

\* \* \*

Your brain is amazing.  
Learn just how much  
it can do.

Over the last few decades, neuroscientists have learned that your brain has the amazing ability to grow and change at any point in your lifetime. This breakthrough has opened the door to myriad possibilities, from increasing intelligence and memory in daily life to recovering from traumatic injuries.

\* \* \*

A study of over 2,000 elderly adults in 2002 suggests that even older brains have plenty of room to improve and learn. (Ball, et al., 2002). After 10 hours of training over the course of six weeks, elderly participants gained **skills that transferred to real-world abilities**—they experienced fewer declines in their ability to perform basic daily activities.

\* \* \*

Brain training has the potential to change lives

Neuroplasticity can have wide-ranging applications if properly and carefully explored. Researchers have used brain training to rehabilitate patients with brain trauma,

chemofog, Mild Cognitive Impairment, and more. But healthy people have also used brain training to sharpen their daily lives and ward off cognitive decline. You, too, can harness the

power of neuroplasticity to remember more, every aspect of life. The benefits may well be think faster, and **achieve your full potential** in endless.

\* \* \*

## Developed by neuroscientists

Lumosity's groundbreaking program is based on extensive research in the field of neuroplasticity. Our in-house R&D team works with researchers from Berkeley, Columbia, and more to create the most effective training possible.

Read more about the science >>

\* \* \*

## Proven benefits

Multiple studies have been published on Lumosity's ability to improve key abilities such as working memory, visual attention, fluid intelligence, and executive function. No matter what your age, improving these core cognitive abilities can improve real-life abilities.

Read more about the proven benefits >>

\* \* \*

## Collaborators

\*\*\*

### **Maurice Finn and Skye McDonald, PhD**

University of New South Wales

Lumosity training to improve cognition in patients with mild cognitive impairment (MCI)

\*\*\*

### **Shelli Kesler, PhD**

Stanford University

Improving cognitive outcomes in cancer survivors and children with genetically based learning disabilities

\*\*\*

### **Chris Johnson, PhD**

University of California, San Diego

Lumosity training to improve outcomes in combat veterans suffering from traumatic brain injuries

\* \* \*

C. Brain Trainer mobile app capture, April 8, 2013 (Exhibit C)

### **Brain Trainer by Lumosity.com**

\* \* \*

Results indicate that Lumosity can improve a wide variety of core cognitive skills – from attention and memory to intelligence and math skills. These improved abilities can help people do better in school, perform more effectively at work, and live a more productive life. Learn more about the science behind Lumosity in the Science section.

\* \* \*

D. “Reach New Heights” email (Exhibit D)

### **Reach New Heights with Lumosity**

Lumosity training has had positive results for several populations – and the below Mensa Research Journal study shows that Lumosity can help healthy adults improve too.

\* \* \*

### **Lumosity Training Really Transfers, New Study Says**

\* \* \*

Lumosity’s neuroscience team, in collaboration with researchers from Stanford and San Francisco State University, published an important new study in *Mensa Research Journal* in 2011. This was the first peer-reviewed, controlled trial to demonstrate that web-based cognitive training can enhance cognitive

performance in healthy adults.

\* \* \*

### **Why this study matters**

\* \* \*

This study shows that Lumosity training is something that can stick with you beyond the games. Whether at home, at work, or at play, the benefits of Lumosity training can enhance certain cognitive functions that you rely upon in different aspects of life. You use working memory to juggle complex ideas at work, and visual attention to focus on important information.

\* \* \*

- E. “Lumosity in the Classroom Can Positively Impact Students” blog post, June 4, 2003 (Exhibit E)

### **Lumosity in the classroom can positively impact students**

\* \* \*

So far, results are promising: LEAP students who trained with Lumosity improved scores on standardized tests of cognitive ability.

### **The link between Lumosity and classroom learning**

In any learning process, strong core cognitive abilities provide students of all ages with the mental scaffolding to support more complex activities such as formulating an argument, writing a creative story, and navigating social situations. Researchers have found that core cognitive abilities such as working memory and processing speed are factors for educational achievement in math, science, and reading.

\* \* \*

### **How Lumosity impacted student performance**

\* \* \*

1 After analyzing data from 45 LEAP schools in 6 countries, we found that  
2 students who trained with Lumosity for a semester showed significant  
3 improvements in assessment scores compared to students who kept to a  
4 standard academic schedule.

5 \* \* \*

- 6 F. “Lumosity’s Athlete Testimonial Contest” blog post, June 25, 2012  
7 (Exhibit F)

8 **Lumosity’s Athlete Testimonial Contest!**

9 **STRONG MIND, STRONG BODY**

10 *“Lumosity helps me stay focused*  
11 *during the last mile of the race.”*

12 Show us how Lumosity has helped take  
13 your athletic abilities to the next level for  
14 the chance to win a Lifetime Subscription,  
15 the new iPad, and more!

16 \* \* \*

17 The best athletes don’t just have strong bodies. They also have strong  
18 minds equipped with excellent attention, great memory for routines,  
19 incredible flexibility for adapting to new situations, and reaction speeds  
20 quick enough to handle any incoming ball, puck, or challenge. No matter  
21 what kind of athlete you are, it’s possible to enhance these skills using  
22 Lumosity!

23 Has Lumosity training helped YOU become a better athlete? Then enter  
24 the Lumosity Athlete Testimonial Contest by sharing your story and a  
25 photo of you engaged in an athletic pursuit!

26 \* \* \*

- 27 G. “How Brain Training Can Improve Your Athletic Game” blog post,  
28 August 30, 2011 (Exhibit G)

**How Brain Training Can Improve Your Athletic Game**

\* \* \*

With seasons starting for football, basketball, and other sports, we've received many inquiries from our users about how cognitive training with tools like Lumosity can help people become better athletes.

\* \* \*

With athletes and coaches looking for every possible edge, it's no surprise that there are dozens of studies devoted to cognitive training and sports performance that target everything from soccer and cricket to golf and tennis.

\* \* \*

H. "Improve Your Job Performance, Attitude, and Ratings" blog post, January 17, 2012 (Exhibit H)

## **Improve Your Job Performance, Attitude, and Ratings**

### **EMPLOYEE OF THE MONTH**

#### **You!**

The New Year marks changes in many areas of our lives, and work is no exception. We may resolve to get a more exciting job, finally earn that big promotion, or win a major deal. There are several ways for us to prepare for the challenges associated with achieving these goals: we rehearse interviews, conduct research, and burn the midnight oil at the office.

Here at Lumosity we're deeply interested in the real-world applications of cognitive training, and we often hear from users who wonder whether cognitive training may improve their performance on the job. So far, there are just a few examples of cognitive interventions targeted to improve job performance.

\* \* \*

Multiple studies have found Lumosity training to be effective in improving core cognitive capacities such as working memory and attention. Proficiency in these crucial functions has been correlated to manager ratings of workplace performance . . . .

So if a new job or promotion is on your wish list for 2012, why not put in some training time with popular working memory exercises like Memory Matrix or Playing Koi? And if you've found that Lumosity has given you a boost in your job search or workplace performance, comment and tell us your story!



1 I. Pandora radio ad (Exhibit I)

2 ANNOUNCER: Hey, Pandora listener. Can you remember the name of  
3 that song you just heard? Most people find that memory declines with age.  
4 But your memory doesn't have to. Control and improve your memory with  
5 Lumosity.com, the personal trainer for your brain.

6 Designed by neuroscientists and used by 25 million people, Lumosity  
7 employs the science of neuroplasticity to improve your memory and  
8 attention. Try a quick brain workout today. Visit Lumosity.com.

9 J. "Select Your Subscription" website capture (Exhibit J)

10 **Benefits Everyone**

11 In 2007, we learned that my mother had early  
12 onset Alzheimer's. I joined Lumosity at first for  
13 my mother. I now use this site not only for her,  
14 but for my brain as well.

15 K. "The Benefits of Cognitive Reserve" blog post, January 24, 2011 and  
16 "Cognitive Reserve and the Effects of Aging" email to Lumosity users  
17 (Exhibit K)

18 **The Benefits of Cognitive Reserve**

19 By Joe Hardy

20 Exercising your brain at a young age can protect your cognitive abilities as  
21 you get older, a team of researchers at the University of California, San  
22 Francisco recently reported in the *Journal of American Medical*  
23 *Association*. Led by Dr. Kristine Yaffe, the researchers followed a group  
24 of close to 1,000 individuals for nine years, measuring brain function and  
25 taking blood samples along the way.

26 They found that levels of several compounds in the bloodstream – called  
27 beta-amyloids – predicted subsequent cognitive decline. These  
28 compounds are related to Alzheimer's Disease, so this relationship is not  
entirely surprising. The protective effects of brain exercise were more  
interesting. The researchers found that people with high levels of  
cognitive reserve – as measured by previous experiences with cognitively  
stimulating activities like education – were relatively protected against  
cognitive decline associated with these chemical changes. In other words,  
if you take two people with the same levels of blood plasma beta-

amyloids, the person with more cognitive reserve (built up through prior brain exercise) is likely to have better cognitive fitness down the road.

The message is clear: cognitively stimulating activity is critical for brain health and fitness. The more you exercise your brain now, the better off you'll be later.

\* \* \*

L. "Lumosity ADHD" website capture (Exhibit L)

**Courses • Medical Conditions • Lumosity ADHD**

## **Lumosity ADHD**

SCIENTIFICALLY DESIGNED

- Specifically designed brain training for ADHD
- Develop sustained attention and focus
- Targets improvement of working memory
- Fun and easy: full workout in less than 10 minutes/day

Enroll

\* \* \*

## **More courses**

Lumosity TBI

Lumosity Cancer Recovery II

Lumosity Cancer Recovery I

Lumosity PTSD

## **Other Course Categories**

- Student
- Core Brain Training
- Peak Performance

\* \* \*

## **Lumosity User Stories**

*I'm a 20-year old college student studying bioengineering, and as it turns out, I also have fairly severe ADHD, inattentive subtype – my test results say my processing speed and memory are on the low end of average, and that my visual attention is literally borderline . . . . I have noticed that after about two weeks of intensive memory, attention, and speed training, I'm able to read almost twice as fast as I was able to before, and my reflexes and spatial abilities seem to have improved enough that my martial arts performance (I spar competitively in Tae Kwon Do) has suddenly become much better. These effects seem to be entirely independent of my medication usage. I'm glad I found your site – I'm hoping that with enough persistence and diverse training, I'll be able to improve my visual attention and processing speed enough to at least reduce my medication dosage. Keep up the great work!*

- M. “We Want To Hear Your Story!” blog post, September 28, 2009 (Exhibit M)

### **We Want to Hear Your Story!**

\* \* \*

Here's an example of a touching testimonial that we recently received from Dr. David Darbro. Dr. Darbro suffered from a stroke in 2005, and he now uses Lumosity to regain lost mental function.

\* \* \*

- N. “Cognitive Training Improves Executive Function in Breast Cancer Survivors” press release, May 14, 2013 (Exhibit N)

### **Cognitive Training Improves Executive Function in Breast Cancer Survivors**

#### **Randomized Controlled Study on Cancer-Related Cognitive Impairment Published in Peer-Reviewed Journal Clinical Breast Cancer**

\* \* \*

The most common quality-of-life complaint from breast cancer survivors is the cognitive effect of cancer treatments,” said Joe Hardy, Ph.D., VP of Research & Development at Lumosity. “These results are interesting

1 because they suggest that online cognitive training shows promise as an  
2 intervention for cognitive difficulties in breast cancer survivors, and even  
3 long-term survivors can benefit.

4 \* \* \*

5 We're committed to helping people from all walks of life improve their  
6 core cognitive abilities, and we're excited that this study has shown very  
7 promising results for a real-world clinical application of cognitive training  
8 for cancer survivors," said Hardy. "We've created Lumosity to be an  
9 accessible tool for anyone who wants to train their brain, as well as  
10 researchers who want to study the effects of cognitive training on specific  
11 populations.

12 \* \* \*

### 13 Incentives for Consumer Testimonials

14 19. The Lumosity website and other online marketing materials, including emails to  
15 trial users and paid subscribers, featured 160 testimonials by users of the Lumosity Program.  
16 Defendants used these testimonials to promote a wide range of benefits for the Lumosity  
17 Program, particularly improved school, work, and athletic performance. Forty-six of these  
18 testimonials were not spontaneously generated by consumers but instead were solicited by  
19 Defendants as part of contests where consumers received significant prizes such as an iPad, a trip  
20 to San Francisco, and a lifetime subscription to the Lumosity Program. This fact was not  
21 adequately disclosed to consumers and would materially affect the weight and credibility  
22 consumers assigned to such testimonials.

23 20. Consumers visiting the Lumosity.com website could click on "User Stories,"  
24 which featured 34 consumer testimonials or "Lumosity Stories." The following statements and  
25 depictions appeared on the User Stories page:  
26  
27  
28

Excerpt from the Lumosity.com website capture (Exhibit B)

## Here are a few reasons why people play Lumosity

[34 pictures of people at work or engaged in sports, accompanied by one-sentence testimonials called “Lumosity Stories”]

\* \* \*

21. If a consumer clicked on a particular Lumosity Story, they would view testimonials such as the two below, which failed to disclose that Defendants had solicited the testimonials through contests offering substantial prizes.

Excerpt from the Lumosity.com website (Exhibit B)

### **Lumosity stories**

John P. | FAIRFAX

\* \* \*

When I saw the commercial for Lumosity, I joined right away. I had been slow in making decisions, slow in adapting to changing situations in my everyday life, and forgetful. I’ve been practicing mixed martial arts (thai boxing, muay thai, wrestling, jiu jitsu, grappling) since early April and I’m not surprised that my most significant progress has been since early June, when I started doing Lumosity.

\* \* \*

Lumosity’s Speed and Attention games have helped things slow down for me when I’m fighting an opponent. As soon as he moves, I can see what he’s doing and effectively react. The Memory programs have helped me remember my combinations so I can be really loose and not try to think so hard. The Flexibility programs (mainly Brain Shift) have challenged me the most because I’ve had a problem with getting really tense and panicking as my brain “shifts,” but the game has helped me to relax; so if I go from muay thai, to wrestling, to jiu jitsu, back to muay thai, I can effectively react and use the right techniques.

\* \* \*

Kade A. | BOISE

I play goalie, which requires fast reflexes in order to stop 80 mph balls coming at me. I’m heading to college soon for lacrosse, most likely at Princeton. Lumosity has helped my reaction

1 time, attention in class, and my test scores! Without Lumosity I wouldn't be this successful! I'd  
2 recommend it to anyone and everyone!

3 **VIOLATIONS OF THE FTC ACT**

4 22. Section 5(a) of the FTC Act, 15 U.S.C. § 45(a), prohibits unfair or deceptive acts  
5 or practices in or affecting commerce.

6 23. Misrepresentations or deceptive omissions of material fact constitute deceptive  
7 acts or practices prohibited by Section 5(a) of the FTC Act.

8 24. Section 12 of the FTC Act, 15 U.S.C. § 52, prohibits the dissemination of any  
9 false advertisement in or affecting commerce for the purpose of inducing, or which is likely to  
10 induce, the purchase of food, drugs, devices, services, or cosmetics.

11 25. For the purposes of Section 12 of the FTC Act, the Lumosity Program is a service  
12 or a "device" as defined in Section 15(d) of the FTC Act, 15 U.S.C. § 55(d).

13 **COUNT I**

14 **FALSE OR UNSUBSTANTIATED REAL-WORLD PERFORMANCE CLAIMS**

15 26. Through the means described in Paragraph 18, Defendants have represented,  
16 directly or indirectly, expressly or by implication, that training with the Lumosity Program  
17 provides real-world benefits for users by:

- 18 A. Improving performance on everyday tasks;  
19 B. Improving performance in school;  
20 C. Improving performance at work; and  
21 D. Improving athletic performance.

22 27. The representations set forth in Paragraph 26 are false or were not substantiated at  
23 the time the representations were made.  
24  
25  
26  
27  
28

1           28.     Therefore, the making of the representations as set forth in Paragraph 26  
2 constitutes a deceptive act or practice and the making of false advertisements, in or affecting  
3 commerce, in violation of Sections 5(a) and 12 of the FTC Act, 15 U.S.C. §§ 45(a) and 52.  
4

5                           **COUNT II**

6                   **FALSE OR UNSUBSTANTIATED CLAIMS FOR AGE-RELATED CONDITIONS**

7           29.     Through the means described in Paragraph 18, Defendants have represented,  
8 directly or indirectly, expressly or by implication, that training with the Lumosity Program  
9 delays age-related decline in memory and other cognitive function, including protecting against  
10 mild cognitive impairment, dementia, and Alzheimer's disease.  
11

12           30.     The representations set forth in Paragraph 29 are false or were not substantiated at  
13 the time the representations were made.  
14

15           31.     Therefore, the making of the representations as set forth in Paragraph 29  
16 constitutes a deceptive act or practice and the making of false advertisements, in or affecting  
17 commerce, in violation of Sections 5(a) and 12 of the FTC Act, 15 U.S.C. §§ 45(a) and 52.  
18

19                           **COUNT III**

20                   **FALSE OR UNSUBSTANTIATED CLAIMS FOR OTHER HEALTH CONDITIONS**

21           32.     Through the means described in Paragraph 18, Defendants have represented,  
22 directly or indirectly, expressly or by implication, that training with the Lumosity Program  
23 reduces cognitive impairment associated with health conditions, including Turner syndrome,  
24 post-traumatic stress disorder, attention deficit hyperactivity disorder, traumatic brain injury,  
25 stroke, and side effects of chemotherapy.  
26

27           33.     The representations set forth in Paragraph 32 are false or were not substantiated at  
28 the time the representations were made.





**COUNT V**

**DECEPTIVE USE OF TESTIMONIALS**

38. Through the means described in Paragraphs 19 through 21, Defendants have represented, directly or indirectly, expressly or by implication, that the consumer testimonials featured on the Lumosity.com website and in other marketing represented the experiences of users of the Lumosity Program.

39. Defendants failed to disclose, or disclose adequately, that they solicited the testimonials as part of a contest with prizes including a free iPad, a lifetime subscription to the Lumosity Program, and a round-trip to San Francisco.

40. This fact would be material to consumers in their decision to subscribe to the Lumosity Program. The failure to disclose this fact, in light of the representation made, was, and is, a deceptive act or practice, in or affecting commerce, in violation of Section 5(a) of the FTC Act, 15 U.S.C. § 45(a).

**CONSUMER INJURY**

41. Consumers have suffered and will continue to suffer substantial injury as a result of Defendants' violations of the FTC Act. In addition, Defendants have been unjustly enriched as a result of their unlawful acts or practices. Absent injunctive relief by this Court, Defendants are likely to continue to injure consumers, reap unjust enrichment, and harm the public interest.

**THIS COURT'S POWER TO GRANT RELIEF**

42. Section 13(b) of the FTC Act, 15 U.S.C. § 53(b), empowers this Court to grant injunctive and such other relief as the Court may deem appropriate to halt and redress violations of any provision of law enforced by the FTC. The Court, in the exercise of its equitable jurisdiction, may award ancillary relief, including rescission or reformation of contracts,

1 restitution, the refund of monies paid, and the disgorgement of ill-gotten monies, to prevent and  
2 remedy any violation of any provision of law enforced by the FTC.

3  
4 **PRAYER FOR RELIEF**

5 Wherefore, Plaintiff FTC, pursuant to Section 13(b) of the FTC Act, 15 U.S.C. § 53(b),  
6 and the Court's own equitable powers, requests that the Court:

7 A. Enter a permanent injunction to prevent future violations of the FTC Act by  
8 Defendants;

9  
10 B. Award such relief as the Court finds necessary to redress injury to consumers  
11 resulting from Defendants' violations of the FTC Act, including, but not limited to, rescission or  
12 reformation of contracts, restitution, the refund of monies paid, and the disgorgement of ill-  
13 gotten monies; and

14  
15 C. Award Plaintiff the costs of bringing this action, as well as such other and  
16 additional relief as the Court may determine to be just and proper.

17  
18 Dated: January 4, 2016

Respectfully submitted,

19  
20 JONATHAN E. NUECHTERLEIN  
General Counsel

21  
22 /s/ Michelle Rusk

23 MICHELLE RUSK  
24 ANNETTE SOBERATS  
MARY JOHNSON

25 Attorneys for Plaintiff  
26 Federal Trade Commission  
27  
28